



AMENDMENTS TO THE CLAIMS:

Claim 1 (original): A method of forming a metallic feature on a substrate, comprising the steps of:

- providing a stamp having a raised region;
- depositing catalytic particles on a selected area of the stamp, including the raised region thereof;
- providing a substrate;
- applying the stamp to the substrate, such that the raised region of the stamp causes a corresponding indented region in the substrate and at least some of the catalytic particles are transferred to a selected area of the substrate; and
- plating the selected area of the substrate.

Claim 2 (original): A method according to claim 1, wherein the step of depositing catalytic particles on the selected area of the stamp comprises the step of immersing at least the selected area of the stamp in a suspension comprising the catalytic particles.

Claim 3 (original): A method according to claim 2, wherein the step of immersing at least the selected area of the stamp in a suspension comprising the catalytic particles comprises the step of immersing at least the selected area of the stamp in an aqueous suspension comprising the catalytic particles.

Claim 4 (original): A method according to claim 2, further comprising the step of drying at least the selected area of the stamp, after immersion thereof in the suspension.

Claim 5 (original): A method according to claim 4, wherein the step of drying at least the selected area of the stamp comprises the step of blow drying at least the selected area of the

stamp with a gas.

Claim 6 (original): A method according to claim 5, wherein the step of blow drying at least the selected area with a gas comprises the step of blow drying the selected area with nitrogen, helium or air.

Claim 7 (original): A method according to claim 4, wherein the step of depositing catalytic particles on the selected area of the stamp comprises the step of depositing polymer-stabilised catalytic particles on the selected area of the stamp.

Claim 8 (original): A method according to claim 7, wherein the step of depositing polymer-stabilised catalytic particles on the selected area of the stamp comprises the step of depositing catalytic particles stabilised by polyvinylpyrrolidone, poly-2-vinylpyridine or polyvinyl alcohol on the selected area of the stamp.

Claim 9 (original): A method according to claim 1, wherein the step of depositing catalytic particles on the selected area of the stamp comprises the step of depositing palladium-based catalytic particles on the selected area of the stamp.

Claim 10 (original): A method according to claim 9, wherein the step of depositing catalytic particles on the selected area of the stamp comprises the step of depositing polymer-stabilised catalytic particles on the selected area of the stamp.

Claim 11 (original): A method according to claim 10, wherein the step of depositing polymer-stabilised catalytic particles on the selected area of the stamp comprises the step of depositing catalytic particles stabilised by polyvinylpyrrolidone, poly-2-vinylpyridine or polyvinyl alcohol on the selected area of the stamp.

Claim 12 (original): A method according to claim 1, wherein the step of providing a substrate comprises the step of providing a polymeric substrate.

Claim 13 (original): A method according to claim 12, wherein the step of depositing catalytic particles on the selected area of the stamp comprises the step of immersing at least the selected area of the stamp in a suspension comprising the catalytic particles.

Claim 14 (original): A method according to claim 13, further comprising the step of drying at least the selected area of the stamp, after immersion thereof in the suspension.

Claim 15 (original): A method according to claim 12, wherein the step of providing a polymeric substrate comprises the step of providing a substrate formed from a polystyrene, a polyimide, an acrylic or an epoxy.

Claim 16 (original): A method according to claim 1, wherein the step of applying the stamp to the substrate further comprises the step of heating at least one of the stamp or the substrate.

Claim 17 (original): A method according to claim 16, wherein the step of heating at least one of the stamp or the substrate comprises the step of heating one of the stamp or the substrate to around or above the glass transition temperature of the substrate.

Claim 18 (original): A method according to claim 1, further comprising the step of modifying at least the selected area of the substrate to facilitate the deposition of the catalytic particles thereon.

Claim 19 (original): A method according to claim 18, wherein the step of modifying at least the

selected area of the substrate comprises the step of chemically modifying the selected area of the substrate.

Claim 20 (original): A method according to claim 1, further comprising the step of removing some of the catalytic particles from the stamp.

Claim 21 (original): A method according to claim 20, wherein the step of removing some of the catalytic particles from the stamp comprises the steps of applying an adhesive surface to the stamp; and subsequently removing the adhesive surface from the stamp.

Claim 22 (previously withdrawn): A method of forming a metallic feature on a substrate, comprising the steps of:

providing a mould, an inner surface thereof having a raised region, depositing catalytic particles on a selected area of the inner surface of the mould, including the raised region thereof;

providing a substrate material;

moulding the substrate material within the mould, such that a resulting substrate has an indented region corresponding to the raised region of the inner surface of the mould and at least some of the catalytic particles are transferred to a selected area of the substrate; and

plating the selected area of the substrate.

Claim 23 (previously withdrawn): A method according to claim 22, wherein the step of

depositing catalytic particles on the selected area of the inner surface of the mould comprises the step of immersing at least the selected area of the inner surface of the mould in a suspension comprising the catalytic particles.

Claim 24 (previously withdrawn): A method according to claim 23, wherein the step of immersing at least the selected area of the inner surface of the mould in a suspension comprising the catalytic particles comprises the step of immersing at least the selected area of the inner surface of the mould in an aqueous suspension comprising the 10 catalytic particles.

Claim 25 (previously withdrawn): A method according to claim 23, further comprising the step of drying at least the selected area of the mould, after immersion thereof in the suspension.

Claim 26 (previously withdrawn): A method according to claim 25, wherein the step of drying at least the selected area of the mould comprises the step of blow drying at least the selected area of the mould with a gas.

Claim 27 (previously withdrawn): A method according to claim 26, wherein the step of blow drying the selected area with a gas comprises the step of blow drying the selected area with nitrogen, helium or air.

Claim 28 (previously withdrawn): A method according to claim 25, wherein the step of depositing catalytic particles on the selected area of the inner surface of the mould comprises the step of depositing polymer-stabilised catalytic particles on the selected area of the inner surface of the mould.

Claim 29 (previously withdrawn): A method according to claim 28, wherein the step of depositing polymer-stabilised catalytic particles on the selected area of the inner surface of the mould comprises the step of depositing catalytic particles stabilised by polyvinylpyrrolidone, poly-2-vinylpyridine or polyvinyl alcohol on the selected area of the inner surface of the mould.

Claim 30 (previously withdrawn): A method according to claim 22, wherein the step of depositing catalytic particles on the selected area of the inner surface of the mould comprises the step of depositing palladium-based catalytic particles on the inner surface of the mould.

Claim 31 (previously withdrawn): A method according to claim 30, wherein the step of depositing catalytic particles on the selected area of the inner surface of the mould comprises the step of depositing polymer-stabilised catalytic particles on the selected area of the inner surface of the mould.

Claim 32 (previously withdrawn): A method according to claim 31, wherein the step of

depositing polymer-stabilised catalytic particles on the selected area of the inner surface of the mould comprises the step of depositing catalytic particles stabilised by polyvinylpyrrolidone, poly-2-vinylpyridine or polyvinyl alcohol on the selected area of the inner surface of the mould.

Claim 33 (previously withdrawn): A method according to claim 22, wherein the step of providing a substrate material comprises the step of providing a polymeric substrate material.

Claim 34 (previously withdrawn): A method according to claim 33, wherein the step of depositing catalytic particles on the selected area of the inner surface of the mould comprises the step of immersing at least the selected area of the inner surface of the mould in a suspension comprising the catalytic particles.

Claim 35 (previously withdrawn): A method according to claim 34, further comprising the step of drying at least the selected area of the mould, after immersion thereof in the suspension.

Claim 36 (previously withdrawn): A method according to claim 33, wherein the step of providing a polymeric substrate material comprises the step of providing a thermoset substrate material, and wherein the step of moulding the substrate material comprises the steps of moulding the substrate material in an uncured or partially cured state; and curing the substrate material in the mould.

Claim 37 (previously withdrawn): A method according to claim 33, wherein the step of providing a polymeric substrate material comprises the step of providing a thermoplastic substrate material, and wherein the step of moulding the substrate material comprises the step of heating the substrate material to around or above the glass transition temperature thereof.

Claim 38 (previously withdrawn): A method according to claim 33, wherein the step of providing a polymeric substrate material comprises the step of providing a substrate formed from a polystyrene, a polyimide, an acrylic or an epoxy.

Claim 39 (previously withdrawn): A method according to claim 38, wherein the step of providing a polymeric substrate material comprises the step of providing a thermoset substrate material, and wherein the step of moulding the substrate material comprises the steps of moulding the substrate material in an uncured or partially cured state; and curing the substrate material in the mould.

Claim 40 (previously withdrawn): A method according to claim 38, wherein the step of providing a polymeric substrate material comprises the step of providing a thermoplastic substrate material, and wherein the step of moulding the substrate material comprises the step of heating the substrate material to around or above the glass transition temperature thereof.

Claim 41 (previously withdrawn): A method according to claim 22, further comprising the step of removing some of the catalytic particles from the inner surface of the mould.

Claim 42 (previously withdrawn): A method according to claim 41, wherein the step of removing some of the catalytic particles from the inner surface of the mould comprises the steps of- applying an adhesive surface to the inner surface of the mould, and subsequently removing the adhesive surface from the inner surface of the mould.

Claims 43-63 (canceled)

Claim 64 (previously withdrawn): A stamp for application to a substrate, having a selected area comprising a raised region on a surface thereof and at least the selected area of the surface having catalytic particles deposited thereon.

Claim 65 (previously withdrawn): A stamp according to claim 64, wherein the catalytic particles are polymer-stabilised catalytic particles.

Claim 66 (previously withdrawn): A stamp for application to a substrate, comprising polymer-stabilised 5 catalytic particles deposited on a selected area of a surface thereof.

Claim 67 (previously withdrawn): A stamp according to claim 66, wherein the selected area of the surface of the stamp comprises at least one raised region.

Claim 68 (previously withdrawn): An apparatus for preparing a substrate, comprising:
a stamp having a selected area comprising a raised region on a surface thereof and at least the selected area of the surface having catalytic particles deposited thereon; and
means to apply the stamp to a substrate.

Claim 69 (previously withdrawn): An apparatus according to claim 68, further comprising means to plate the substrate.

Claim 70 (previously withdrawn): An apparatus according to claim 69, wherein the means to plate the substrate comprise means to electroless plate or immersion plate the substrate.

Claim 71 (previously withdrawn) An apparatus according to claim 69, further comprising means to selectively remove some of the catalytic particles from the stamp.

Claim 72 (previously withdrawn): An apparatus according to claim 71, further comprising means to plate the substrate.

Claim 73 (previously withdrawn): An apparatus according to claim 72, wherein the means to plate the substrate comprise means to electroless plate or immersion plate the substrate.

Claim 74 (previously withdrawn): An apparatus for preparing a substrate, comprising:
a stamp comprising polymer-stabilised catalytic particles deposited on a selected area of a surface thereof; and
means to apply the stamp to a substrate.

Claim 75 (previously withdrawn): An apparatus according to claim 74, further comprising means to plate the substrate.

Claim 76 (previously withdrawn): An apparatus according to claim 75, wherein the means to plate the substrate comprise means to electroless plate or immersion plate the substrate.

Claim 77 (previously withdrawn): An apparatus according to claim 74, further comprising means to selectively remove some of the catalytic particles from the stamp.

Claim 78 (previously withdrawn): An apparatus according to claim 77, further comprising means to plate the substrate.

Claim 79 (previously withdrawn): An apparatus according to claim 78, wherein the means to plate the 20 substrate comprise means to electroless plate or immersion plate the substrate.

Claim 80 (new): A method of forming a metallic feature on a substrate, comprising the steps of:

- providing a stamp;
- depositing catalytic particles on a selected area of the stamp;
- providing a substrate;
- heating at least one of the stamp or the substrate to around or above the glass transition temperature of the substrate;
- applying the stamp to the substrate, such that at least some of the catalytic particles are transferred to a selected area of the substrate; and
- plating the selected area of the substrate.

Claim 81 (new): A method according to claim 80, wherein the step of depositing catalytic particles on the selected area of the stamp comprises the step of depositing polymer-stabilized catalytic particles on the selected area of the stamp.

Claim 82 (new): A method according to claim 81, wherein the step of depositing polymer-stabilized catalytic particles on the selected area of the stamp comprises the step of depositing catalytic particles stabilized by polyvinylpyrrolidone, poly-2-vinylpyridine or polyvinyl alcohol on the selected area of the stamp.

Claim 83 (new): A method according to claim 82, wherein the step of depositing catalytic

particles on the selected area of the stamp comprises the step of immersing at least the selected area of the stamp in a suspension comprising the catalytic particles.

Claim 84 (new): A method according to claim 83, wherein the step of immersing at least the selected area of the stamp in a suspension comprising the catalytic particles comprises the step of immersing at least the selected area of the stamp in an aqueous suspension comprising the catalytic particles.

Claim 85 (new): A method according to claim 83, further comprising the step of drying at least the selected area of the stamp, after immersion thereof in the suspension.

Claim 86 (new): A method according to claim 85, wherein the step of drying at least the selected area of the stamp comprises the step of blow drying at least the selected area of the stamp with a gas.

Claim 87 (new): A method according to claim 86, wherein the step of blow drying at least the selected area with a gas comprises the step of blow drying the selected area with nitrogen, helium or air.

Claim 88 (new): A method according to claim 80, wherein the step of depositing catalytic particles on the selected area of the stamp comprises the step of depositing palladium-based catalytic particles on the selected area of the stamp.

Claim 89 (new): A method according to claim 80, wherein the step of providing a substrate comprises the step of providing a polymeric substrate.

Claim 90 (new): A method according to claim 89, wherein the step of depositing catalytic

particles on the selected area of the stamp comprises the step of immersing at least the selected area of the stamp in a suspension comprising the catalytic particles.

Claim 91 (new): A method according to claim 90, further comprising the step of drying at least the selected area of the stamp, after immersion thereof in the suspension.

Claim 92 (new): A method according to claim 89, wherein the step of providing a polymeric substrate comprises the step of providing a substrate formed from a polystyrene, a polyimide, an acrylic or an epoxy.

Claim 93 (new): A method according to claim 80, further comprising the step of modifying at least the selected area of the substrate to facilitate the deposition of the catalytic particles thereon.

Claim 94 (new): A method according to claim 93, wherein the step of modifying at least the selected area of the substrate comprises the step of chemically modifying the selected area of the substrate.

Claim 95 (new): A method according to claim 80, further comprising the step of removing some of the catalytic particles from the stamp.

Claim 96 (new): A method according to claim 95, wherein the step of removing some of the catalytic particles from the stamp comprises the steps of applying an adhesive surface to the stamp; and subsequently removing the adhesive surface from the stamp.

Claim 97 (new): A method of forming a metallic feature on a substrate, comprising the steps of:

providing a stamp having a raised region;

depositing polymer-stabilized catalytic particles on a selected area of the stamp, including the raised region thereof;

providing a substrate;

applying the stamp to the substrate, such that the raised region of the stamp causes a corresponding indented region in the substrate and at least some of the catalytic particles are transferred to a selected area of the substrate; and

plating the selected area of the substrate.

Claim 98 (new): A method according to claim 97, wherein the step of depositing polymer-stabilized catalytic particles on the selected area of the stamp comprises the step of immersing at least the selected area of the stamp in a suspension comprising the catalytic particles.

Claim 99 (new): A method according to claim 98, wherein the step of immersing at least the selected area of the stamp in a suspension comprising the catalytic particles comprises the step of immersing at least the selected area of the stamp in an aqueous suspension comprising the catalytic particles.

Claim 100 (new): A method according to claim 97, further comprising the step of drying at least the selected area of the stamp, after said depositing.

Claim 101 (new): A method according to claim 100, wherein the step of drying at least the selected area of the stamp comprises the step of blow drying at least the selected area of the stamp with a gas.

Claim 102 (new): A method according to claim 101, wherein the step of blow drying at least the selected area with a gas comprises the step of blow drying the selected area with nitrogen, helium or air.

Claim 103 (new): A method according to claim 97, wherein the step of depositing polymer-stabilized catalytic particles on the selected area of the stamp comprises the step of depositing catalytic particles stabilized by polyvinylpyrrolidone, poly-2-vinylpyridine or polyvinyl alcohol on the selected area of the stamp.

Claim 104 (new): A method according to claim 97, wherein the step of depositing polymer-stabilized catalytic particles on the selected area of the stamp comprises the step of depositing palladium-based catalytic particles on the selected area of the stamp.

Claim 105 (new): A method according to claim 97, wherein the step of providing a substrate comprises the step of providing a polymeric substrate.

Claim 106 (new): A method according to claim 105, wherein the step of depositing catalytic particles on the selected area of the stamp comprises the step of immersing at least the selected area of the stamp in a suspension comprising the catalytic particles.

Claim 107 (new): A method according to claim 106, further comprising the step of drying at least the selected area of the stamp, after immersion thereof in the suspension.

Claim 108 (new): A method according to claim 105, wherein the step of providing a polymeric substrate comprises the step of providing a substrate formed from a polystyrene, a polyimide, an acrylic or an epoxy.

Claim 109 (new): A method according to claim 97, wherein the step of applying the stamp to the substrate further comprises the step of heating at least one of the stamp or the substrate.

Claim 110 (new): A method according to claim 109, wherein the step of heating at least one of the stamp or the substrate comprises the step of heating one of the stamp or the substrate to

around or above the glass transition temperature of the substrate.

Claim 111 (new): A method according to claim 97, further comprising the step of modifying at least the selected area of the substrate to facilitate the deposition of the polymer-stabilized catalytic particles thereon.

Claim 112 (new): A method according to claim 111, wherein the step of modifying at least the selected area of the substrate comprises the step of chemically modifying the selected area of the substrate.

Claim 113 (new): A method according to claim 97, further comprising the step of removing some of the catalytic particles from the stamp.

Claim 114 (new): A method according to claim 113, wherein the step of removing some of the catalytic particles from the stamp comprises the steps of applying an adhesive surface to the stamp; and subsequently removing the adhesive surface from the stamp.

Claim 115 (new): A method of forming a metallic feature on a substrate, comprising the steps of:

- providing a stamp having a raised region;
- depositing polymer-stabilized catalytic particles on a selected area of the stamp, including the raised region thereof, by immersing at least the selected area of the stamp in a suspension comprising the catalytic particles;
- after immersion of the selected area of the stamp, drying at least the selected area of the stamp;
- providing a polymeric substrate;
- heating at least one of the stamp or the substrate;
- applying the stamp to the substrate, such that the raised region of the stamp causes a

corresponding indented region in the substrate and at least some of the catalytic particles are transferred to a selected area of the substrate; and
plating the selected area of the substrate.

Claim 116 (new): A method according to claim 115, wherein the step of depositing polymer-stabilized catalytic particles on the selected area of the stamp comprises the step of depositing catalytic particles stabilized by polyvinylpyrrolidone on the selected area of the stamp.

Claim 117 (new): A method according to claim 115, wherein the step of depositing polymer-stabilized catalytic particles on the selected area of the stamp comprises the step of depositing catalytic particles stabilized by poly-2-vinylpyridine on the selected area of the stamp.

Claim 118 (new): A method according to claim 115, wherein the step of depositing polymer-stabilized catalytic particles on the selected area of the stamp comprises the step of depositing catalytic particles stabilized by polyvinyl alcohol on the selected area of the stamp.

Claim 119 (new): A method according to claim 115, wherein the step of depositing polymer-stabilized catalytic particles on the selected area of the stamp comprises the step of depositing palladium-based catalytic particles on the selected area of the stamp.

Claim 120 (new): A method according to claim 115, further comprising the step of modifying at least the selected area of the substrate to facilitate the deposition of the polymer-stabilized catalytic particles thereon.

Claim 121 (new): A method according to claim 120, wherein the step of modifying at least the selected area of the substrate comprises the step of chemically modifying the selected area of the substrate.